



CLAIMS

1. (currently amended) A method for remotely adjusting a hearing aid of a user, comprising
2 the steps of:
3 generating a command via a first computer at a first location;
4 transmitting the command to a second computer at a second location over a remote data link;
5 sending the command from the second computer to a digital signal processor in one of a
6 telephone and the hearing aid;
7 outputting a test tone from the digital signal processor based on the output command to a user of
8 the telephone wearing the hearing aid;
9 receiving a user response to the test tone over the remote data link; and
10 adjusting the hearing aid based on the user response to the test tone, wherein:
11 said adjusting step comprises the steps of:
12 transmitting the user response to the first computer over the remote data link;
13 retrieving a stored audiogram from memory based on the accuracy of the
14 response; and
15 uploading the audiogram into the hearing aid of the user over the remote data
16 link; and
17 said audiogram is a compensation curve for adjusting performance characteristics of the
18 hearing aid based on the user response.

1 A1 2. (original) The method of claim 1, wherein said command is a DTMF tone.

1 3. (original) The method of claim 1, wherein said receiving step comprises inputting a
2 response to the outputted command into the second computer via a keyboard attached to the computer.

1 4. (original) The method of claim 1, wherein said receiving step comprises inputting a
2 response to the command via a key pad on the telephone.

1 5-6. (canceled)

1 7. (currently amended) The method of claim 1, wherein said adjusting step further
2 comprises the steps of:

3 transmitting the user response to the first computer over the remote data link;
4 determining an accuracy of the user response[[;]]
5 retrieving a stored audiogram from memory based on the accuracy of the response; and
6 uploading the stored audiogram into the hearing aid of the user over the remote data link.

1 8. (currently amended) A method for adjusting a hearing aid of a user, comprising the steps
2 of:
3 generating a command via a computer;
4 sending the command to a digital signal processor in one of a telephone and the hearing aid;
5 outputting a test tone from the digital signal processor based on the command to the user of the
6 telephone wearing the hearing aid;
7 receiving a response to the test tone by the user; [[and]]
8 storing the response to the test tone by the user in the computer;
9 retrieving a stored audiogram from memory based on the accuracy of the stored response; and
10 uploading the audiogram into the hearing aid of the user.

1 9. (original) The method of claim 8, wherein said command is a DTMF tone.

1 10. (original) The method of claim 8, wherein said receiving step comprises inputting a
2 response to the output command into the computer via a keyboard attached to the computer.

1 11. (original) The method of claim 8, wherein said receiving step comprises inputting a
2 response to the command via a keypad on the telephone.

1 12. (canceled)

1 13. (currently amended) The method of claim [[12]] 8, wherein said audiogram is a
2 compensation curve for adjusting performance characteristics of the hearing aid based on the user
3 response.

1 14. (original) The method of claim 8, wherein the command is generated by a first computer
2 at a first location and is received by a second computer at a second location, and said second computer
3 sends the command to the digital processor.

1 15. (original) The method of claim 14, wherein the response is stored in the first computer.

1 16. (original) The method of claim 14, wherein the response is stored in the second
2 computer.

1 17. (original) The method of claim 14, wherein the response is stored in the first and second
2 computers.

1 18. (original) The method of claim 8, wherein the digital signal processor is located in the
2 hearing aid and step of sending the command to the digital signal processor is by a wireless link.

1 19. (new) A method for remotely adjusting a hearing aid of a user, comprising the steps of:
2 generating a command via a first computer at a first location;
3 transmitting the command to a second computer at a second location over a remote data link;
4 sending the command from the second computer to a digital signal processor in one of a
5 telephone and the hearing aid;
6 outputting a test tone from the digital signal processor based on the output command to a user of
7 the telephone wearing the hearing aid;
8 receiving a user response to the test tone over the remote data link; and
9 adjusting the hearing aid based on the user response to the test tone, wherein said receiving step
10 comprises inputting a response to the outputted command into the second computer via a keyboard
11 attached to the computer.

1 20. (new) A method for remotely adjusting a hearing aid of a user, comprising the steps of:
2 generating a command via a first computer at a first location;
3 transmitting the command to a second computer at a second location over a remote data link;
4 sending the command from the second computer to a digital signal processor in one of a
5 telephone and the hearing aid;
6 outputting a test tone from the digital signal processor based on the output command to a user of
7 the telephone wearing the hearing aid;
8 receiving a user response to the test tone over the remote data link; and
9 adjusting the hearing aid based on the user response to the test tone, wherein said adjusting step
10 comprises the steps of:
11 transmitting the user response to the first computer over the remote data link;

determining an accuracy of the user response; retrieving a stored audiogram from memory based on the accuracy of the response; and uploading the stored audiogram into the hearing aid of the user over the remote data link.

21. (new) A method for adjusting a hearing aid of a user, comprising the steps of:
generating a command via a computer;
sending the command to a digital signal processor in one of a telephone and the hearing aid;
outputting a test tone from the digital signal processor based on the command to the user of the telephone wearing the hearing aid;
receiving a response to the test tone by the user; and
storing the response to the test tone by the user in the computer, wherein said receiving step comprises inputting a response to the output command into the computer via a keyboard attached to the computer.

22. (new) A method for adjusting a hearing aid of a user, comprising the steps of:
generating a command via a computer;
sending the command to a digital signal processor in one of a telephone and the hearing aid;
outputting a test tone from the digital signal processor based on the command to the user of the telephone wearing the hearing aid;
receiving a response to the test tone by the user; and
storing the response to the test tone by the user in the computer, wherein the command is generated by a first computer at a first location and is received by a second computer at a second location, and said second computer sends the command to the digital processor.

23. (new) A method for adjusting operations of a hearing aid of a user, wherein:
a computer system transmits a sequence of one or more non-audible commands to a processor in
one of a telephone and the hearing aid;
the processor causes an audible test tone to be generated in response to receipt of each command,
wherein:
when the processor is in the telephone, the telephone generates each test tone; and
when the processor is in the hearing aid, the hearing aid generates each test tone;
the computer system receives a response to each of one or more of the test tones from the user;
the computer system processes the one or more responses from the user to generate parameters
for controlling the operations of the hearing aid; and
the computer system transmits the parameters to the hearing aid to adjust the operations of the
hearing aid.

24. (new) The invention of claim 23, wherein the processor is in the telephone and the telephone generates each test tone.

25. (new) The invention of claim 24, wherein the user enters each response via a key pad on the telephone and the telephone transmits the user's responses to the computer system.

26. (new) The invention of claim 24, wherein the user enters each response via a keyboard attached to the computer system.

27. (new) The invention of claim 24, wherein the computer system transmits the commands to the processor in the telephone using DTMF signaling.

1 28. (new) The invention of claim 23, wherein the processor is in the hearing aid and the
2 hearing aid generates each test tone.

1 29. (new) The invention of claim 28, wherein the user enters each response via a key pad
2 on the telephone and the telephone transmits the user's responses to the computer system.

1 30. (new) The invention of claim 28, wherein the user enters each response via a keyboard
2 attached to the computer system.

1 31. (new) The invention of claim 23, wherein:
2 the computer system comprises a local computer co-located with the user; and
3 the local computer transmits the commands to the processor and receives the user's responses.

1 32. (new) The invention of claim 31, wherein the local computer generates and transmits
2 the parameters to the hearing aid.

1 33. (new) The invention of claim 31, wherein:
2 the computer system further comprises a remote computer located remotely from the user;
3 the local computer transmits the user's responses to the remote computer;
4 the remote computer generates and transmits the parameters to the local computer; and
5 the local computer transmits the parameters to the hearing aid.

1 34. (new) The invention of claim 33, wherein the remote computer transmits each
2 command to the local computer.

1 35. (new) The invention of claim 23, wherein:
2 the computer system comprises a remote computer located remotely from the user; and
3 the remote computer transmits the commands to the processor, receives the user's responses, and
4 generates and transmits the parameters to the hearing aid.

1 36. (new) A hearing aid for a user, the hearing aid comprising a processor adapted to:
2 receive a sequence of one or more non-audible commands from a computer system;
3 cause an audible test tone to be generated by the hearing aid in response to receipt of each
4 command, wherein:
5 the computer system receives a response to each of one or more of the test tones from the
6 user; and
7 the computer system processes the one or more responses from the user to generate
8 parameters for controlling operations of the hearing aid; and
9 receive the parameters from the computer system to adjust the operations of the hearing aid.

1 37. (new) The invention of claim 36, wherein the processor receives the command
2 sequence and the parameters directly from the computer system.

1 38. (new) The invention of claim 36, wherein the processor receives the command
2 sequence and the parameters from the computer system via a telephone.

1 39. (new) The invention of claim 38, wherein the command sequence and the parameters
2 are transmitted to the processor from the telephone using DTMF signaling.

1 40. (new) A telephone for adjusting operations of a hearing aid of a user, the telephone
2 comprising a processor adapted to:

3 receive a sequence of one or more non-audible commands from a computer system; and
4 cause an audible test tone to be generated by the telephone in response to receipt of each
5 command, wherein:

6 the computer system receives a response to each of one or more of the test tones from the
7 user; and

8 the computer system processes the one or more responses from the user to generate
9 parameters for controlling the operations of the hearing aid.

1 41. (new) The invention of claim 40, wherein the telephone is further adapted to receive
2 the parameters from the computer system and to transmit the parameters to the hearing aid to adjust the
3 operations of the hearing aid.

1 42. (new) The invention of claim 41, wherein the telephone is adapted to transmit the
2 parameters to the hearing aid using DTMF signaling.

1 43. (new) The invention of claim 40, wherein the telephone is further adapted to:
2 receive each response from the user via a key pad on the telephone; and
3 transmit the user's responses to the computer system.

1 44. (new) A computer system for adjusting operations of a hearing aid of a user, wherein
2 the computer system is adapted to:

3 transmit a sequence of one or more non-audible commands to a processor in one of a telephone
4 and the hearing aid, wherein the processor causes an audible test tone to be generated in response to
5 receipt of each command, wherein:

6 when the processor is in the telephone, the telephone generates each test tone; and

7 when the processor is in the hearing aid, the hearing aid generates each test tone;

8 receive a response to each of one or more of the test tones from the user;

9 process the one or more responses from the user to generate parameters for controlling the
10 operations of the hearing aid; and

11 transmit the parameters to the hearing aid to adjust the operations of the hearing aid.

1 45. (new) The invention of claim 44, wherein the processor is in the telephone and the
2 telephone generates each test tone.

1 46. (new) The invention of claim 45, wherein the user enters each response via a key pad
2 on the telephone and the computer system is adapted to receive the user's responses from the telephone.

1 47. (new) The invention of claim 45, wherein the computer system is adapted to receive
2 each response from the user via a keyboard attached to the computer system.

1 48. (new) The invention of claim 45, wherein the computer system is adapted to transmit
2 the commands to the processor in the telephone using DTMF signaling.

1 49. (new) The invention of claim 44, wherein the processor is in the hearing aid and the
2 hearing aid generates each test tone.

1 50. (new) The invention of claim 49, wherein the user enters each response via a key pad
2 on the telephone and the computer system is adapted to receive the user's responses from the telephone.

1 51. (new) The invention of claim 49, wherein the computer system is adapted to receive
2 each response from the user via a keyboard attached to the computer system.

1 52. (new) The invention of claim 44, wherein:
2 the computer system comprises a local computer co-located with the user; and
3 the local computer is adapted to transmit the commands to the processor and receive the user's
4 responses.

1 53. (new) The invention of claim 52, wherein the local computer is adapted to generate and
2 transmit the parameters to the hearing aid.

1 54. (new) The invention of claim 52, wherein:
2 the computer system further comprises a remote computer located remotely from the user;
3 the local computer is adapted to transmit the user's responses to the remote computer;
4 the remote computer is adapted to generate and transmit the parameters to the local computer;
5 and
6 the local computer is adapted to transmit the parameters to the hearing aid.

1 55. (new) The invention of claim 54, wherein the remote computer is adapted to transmit
2 each command to the local computer.

1 56. (new) The invention of claim 44, wherein:
2 the computer system comprises a remote computer located remotely from the user; and
3 the remote computer is adapted to transmit the commands to the processor, receive the user's
4 responses, and generate and transmit the parameters to the hearing aid.